



FirstNet in California Governance and Next Steps

January 28, 2015

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- Vision
- Governance
- Next Steps
- The Future is Now
(LA-RICS progress)
- Managing Expectations





VISION:

To provide emergency responders with the first nationwide, high-speed, wireless broadband network dedicated to public safety

“FirstNet will be a force multiplier, enabling collaboration to help save more lives, solve more crimes and keep communities safer.”

Jeffrey D. Johnson, Chief (Ret.)
Chief Executive Officer — Western Fire Chiefs Association
FirstNet Board Member

SAIC®

Why a Dedicated Network?



Why Broadband? – Field Data Information Explosion

- Audio, e.g., ShotSpotter
- License plate readers
- Video cameras
- Crime reporting apps
- Text to 9-1-1
- + more...

70 Percent of U.S. Police Departments Use License Plate Readers

San Jose police can tap into volunteer residents' cameras under newly-approved program

By Mike Rosenberg | mrosen

POSTED: 09/09/2014 02:47:06 PM PDT

Antioch Police Announce Launch of Free Smart Phone Application

By EastCountyToday • September 10, 2014 • [Print-Friendly](#)



During Tuesday nights Department announced and demonstrated a free Smart Phone Application. The application is available for free download on iTunes and GooglePlay where people can stay connected wherever they are with mobile access wherever they are.

Crime Push app helps report crime

By Ben Eisler | February 1, 2012 - 06:55 pm



Posted: 7:30 p.m. Friday, May 2, 2014

More Bay Area officers sporting body cameras

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officer body cameras

By Paul Chamber
KTVU.com

WALNUT CREEK — A growing trend for departments throughout the Bay Area, Walnut Creek Police and the City of Walnut Creek are the latest to equip officers with body-worn cameras.

"Keeps people on task. It's a good tool for the district office for prosecution."

FirstNet will Offer Public Safety Users:



Communication

- Video
- Voice (non-mission critical)
- Messaging
- SMS/Text
- Data (Internet)



Applications

- CAD, RMS, NLETS
- FirstNet applications (e.g., AVL)
- Syndicated applications
- Currently used Agency applications

Services

- Records management
- Data storage
- Audio storage
- Database inquiries

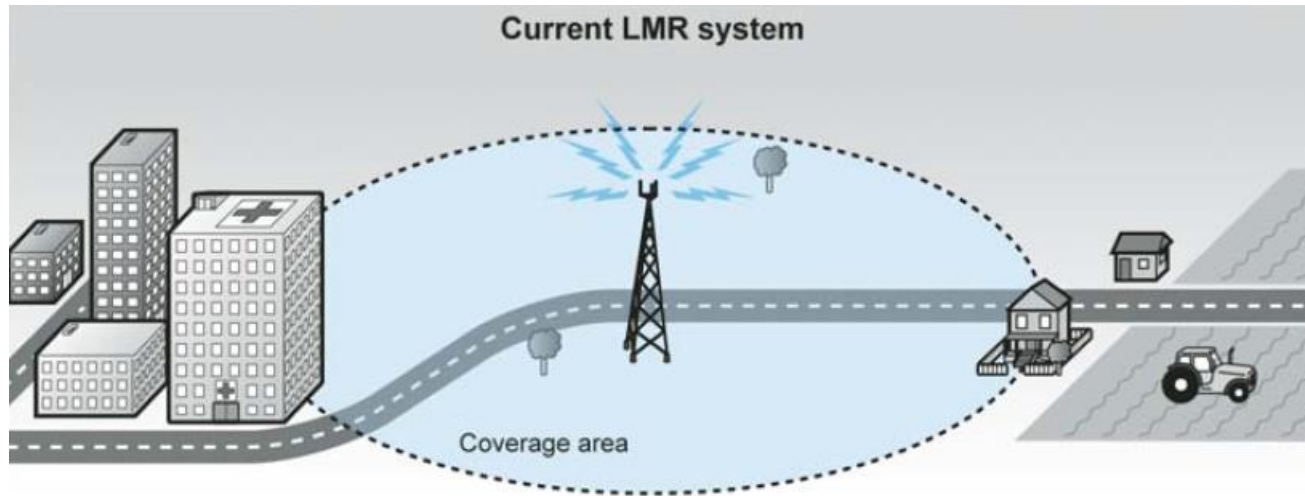


Capabilities

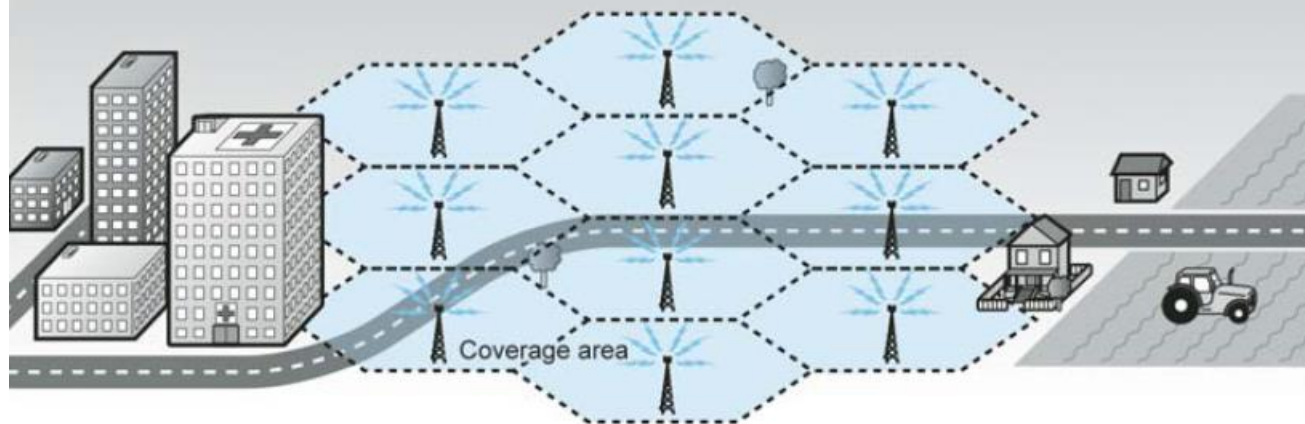
- Network monitoring and status
- Integrated solution and services
- Priority
- Hardened and secure
- Provisioning



Public Safety's Coverage Challenge

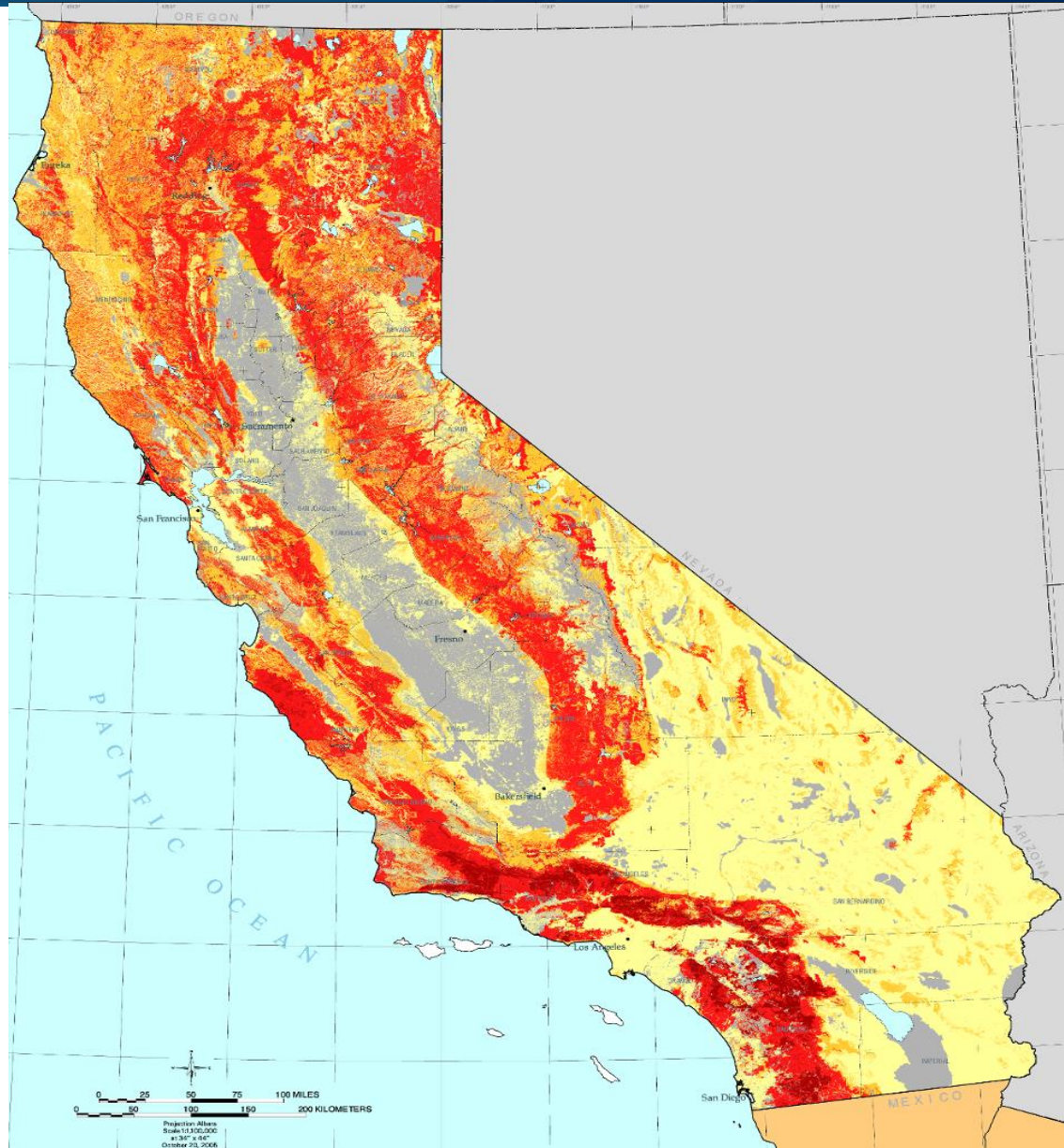


Public safety broadband cellular towers serving same footprint as current LMR system

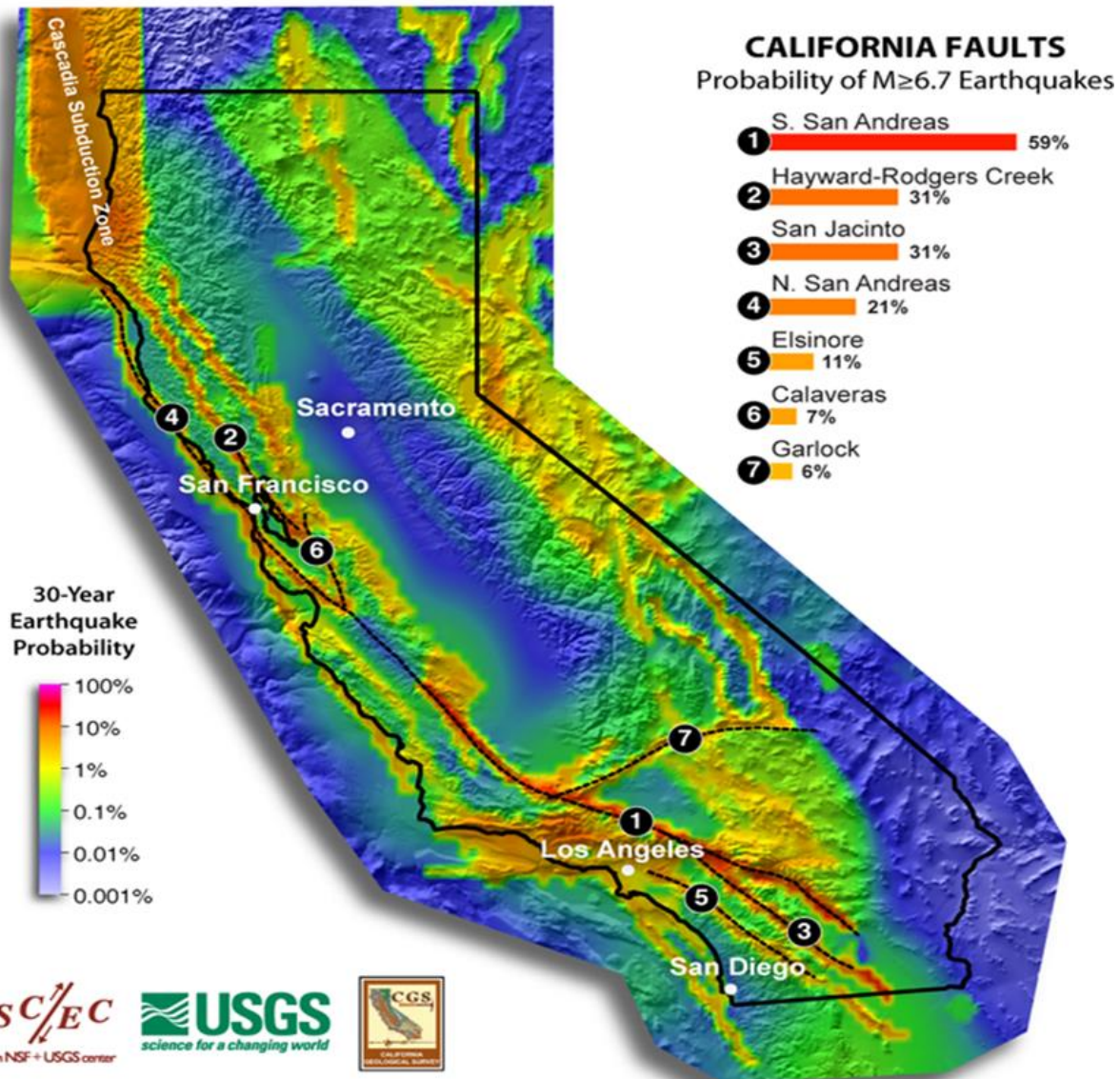


California Fire Danger

Fire Threat Map



California Earthquake Faults



Adjusting Coverage for Public Safety Needs

Agencies

- EMS Departments
- Federal
- Military
- Emergency Management
- Law Enforcement
- Fire Departments

Facilities

- Major State Government Building
- Court Houses
- ▨ Prison Areas
- ▨ Corrections
- ▨ Airport
- + Airports
- Local Emergency Operations Centers
- State Emergency Operation Centers
- Urgent Care Facilities
- Hospitals
- PSAP
- Schools
- Ports
- Amtrak Stations
- Air National Guard (ANG) Sites
- ▨ Army National Guard (ARNG) Installat
- Canada and Mexico Border Crossings

Critical Infrastructure

- ◆ Manufacturing
- Hazardous Materials Routes
- ◆ Energy
- ☢ Nuclear Plants
- ◆ Dams
- ◆ Public Venues



FOR OFFICIAL USE ONLY

FirstNet's "3-in-1" Hybrid Approach to Coverage: Terrestrial + Satellite + Deployable

Hybrid approach enables public safety users
to take their wireless coverage, services, and capacity with them



Off-net mode, no
satellite or Core –
comms among
incident personnel
750-1000 sq. ft.



Mobile Communications units
(mobile comms) on PS vehicles
– become a mobile cell
site/system mounted with an
LTE Picocell:
Incident Area Network (IAN)
750-1000 sq. ft.



Public Safety
Towers
(boomers)
10-25 miles



Macrocell
LTE up to
1-10 miles



Microcell
LTE up to
1 mile



Designated Wilderness
27% of U.S. Land Mass

Rural
68% of U.S. Land Mass

Suburbs
5% of U.S. Land Mass

Urban
Dense Urban

Governance

Governance – Federal Level

- **Federal Communications Commission**
 - 700 MHz public safety spectrum frequency holder
- **National Telecommunications and Information Administration (NTIA)**
 - Part of the Department of Commerce
 - Selected FirstNet Board of Directors
- **First Responder Network Authority (FirstNet)**
 - Managing entity for the public safety spectrum
 - Governing authority for the Nationwide Public Safety Network (NPSBN)



Governance – State Level

- **State of California Governor's Office**
 - Per the Act, designates single officer or governmental body to coordinate with FirstNet
 - Makes the Opt-In/Opt-Out decision
- **California First Responder Network Board (CalFRN)**
 - State's governing body for FirstNet
 - Engages key public safety stakeholders across California
 - Works with Cal OES
- **California Office of Emergency Services (Cal OES)**
 - Designated state point of contact (SPOC) to coordinate with FirstNet
 - Chairs the CalFRN Board
 - Acts as administrator and financial manager



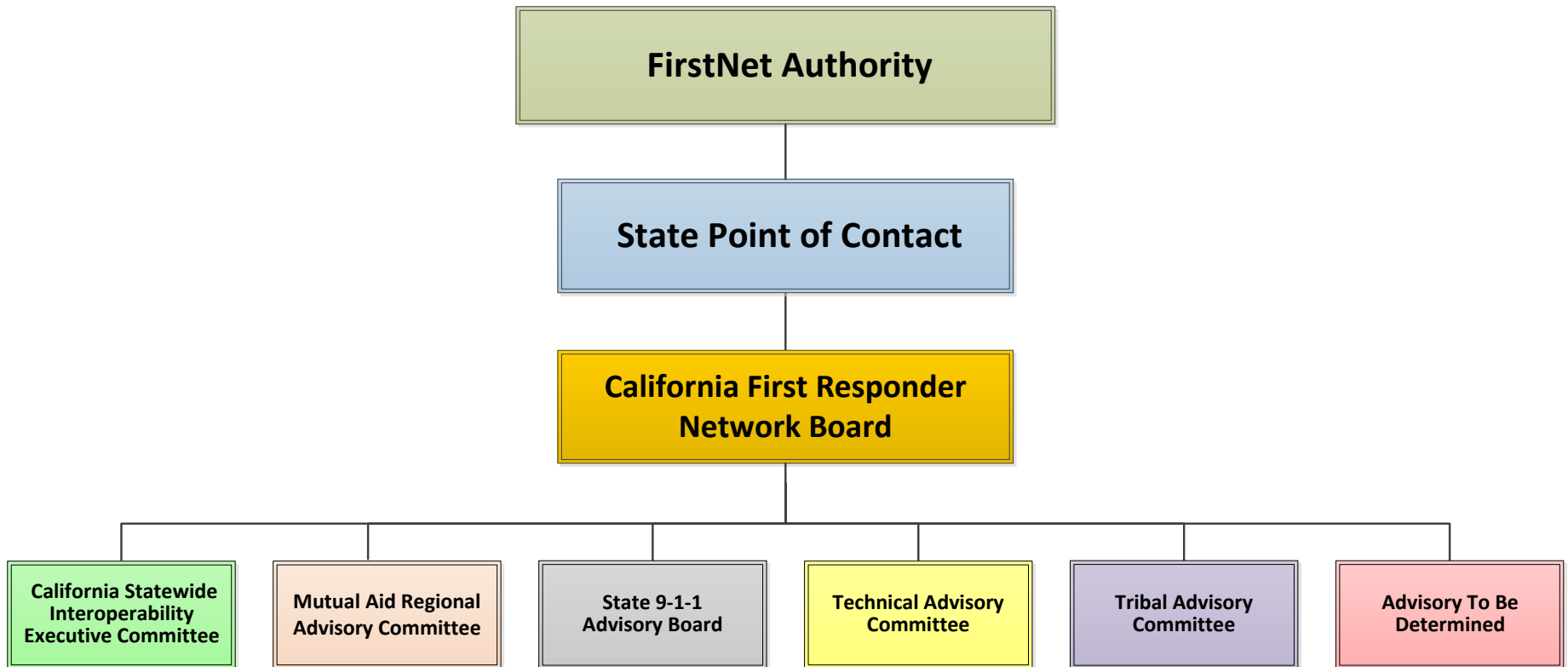
California First Responder Network (CalFRN)

California First Responder Network

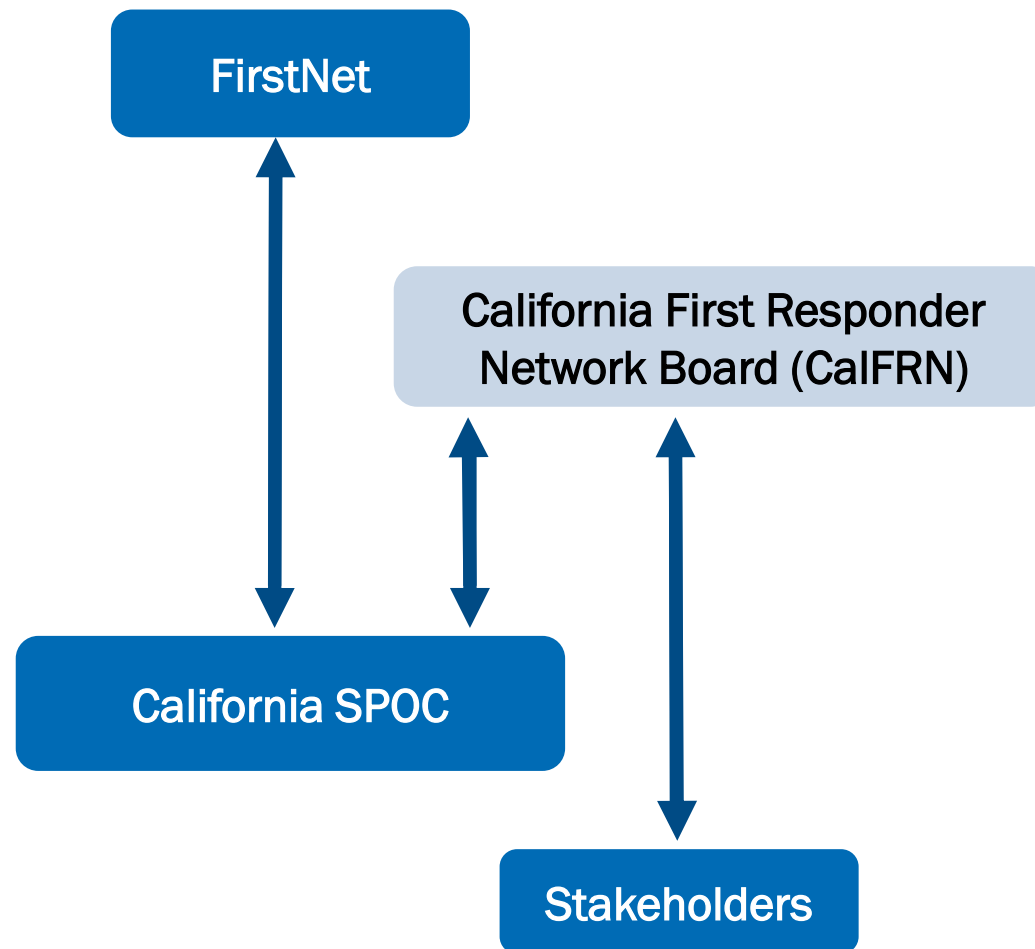
Board includes representatives from:

- Public Safety Communications
- California Governor's Office of Emergency Services
- Department of Technology
- California Department Finance
- California Department of Forestry and Fire Protection
- California Highway Patrol (CHP)
- Emergency Medical Services Authority
- Bay Area Regional Interoperability Communications System (BayRICS)
- Los Angeles Regional Interoperability Communications System (LA-RICS)
- California Police Chiefs Association
- California Fire Chiefs Association
- California State Sheriffs Association
- Tribal, Governor's Office Tribal Advisor

CalFRN Advisory Committees



Communicating with FirstNet



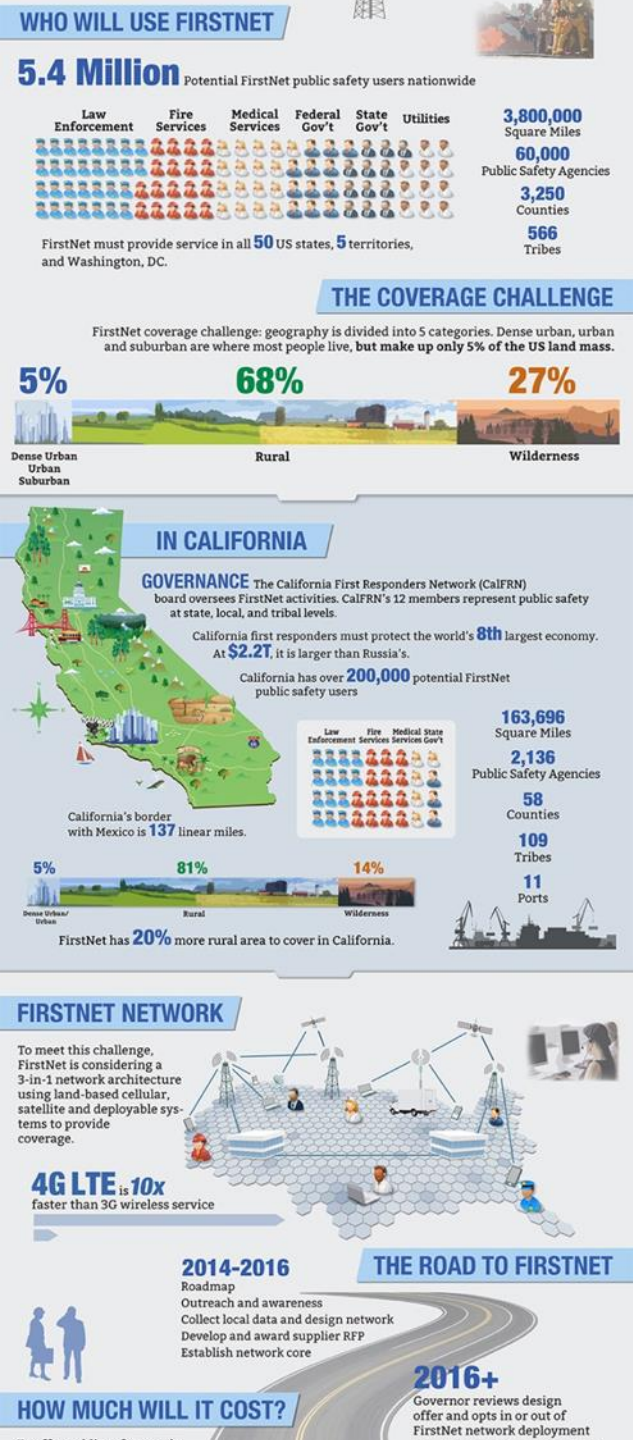
CalFRN gives a voice to California's public safety community

Next Steps for California

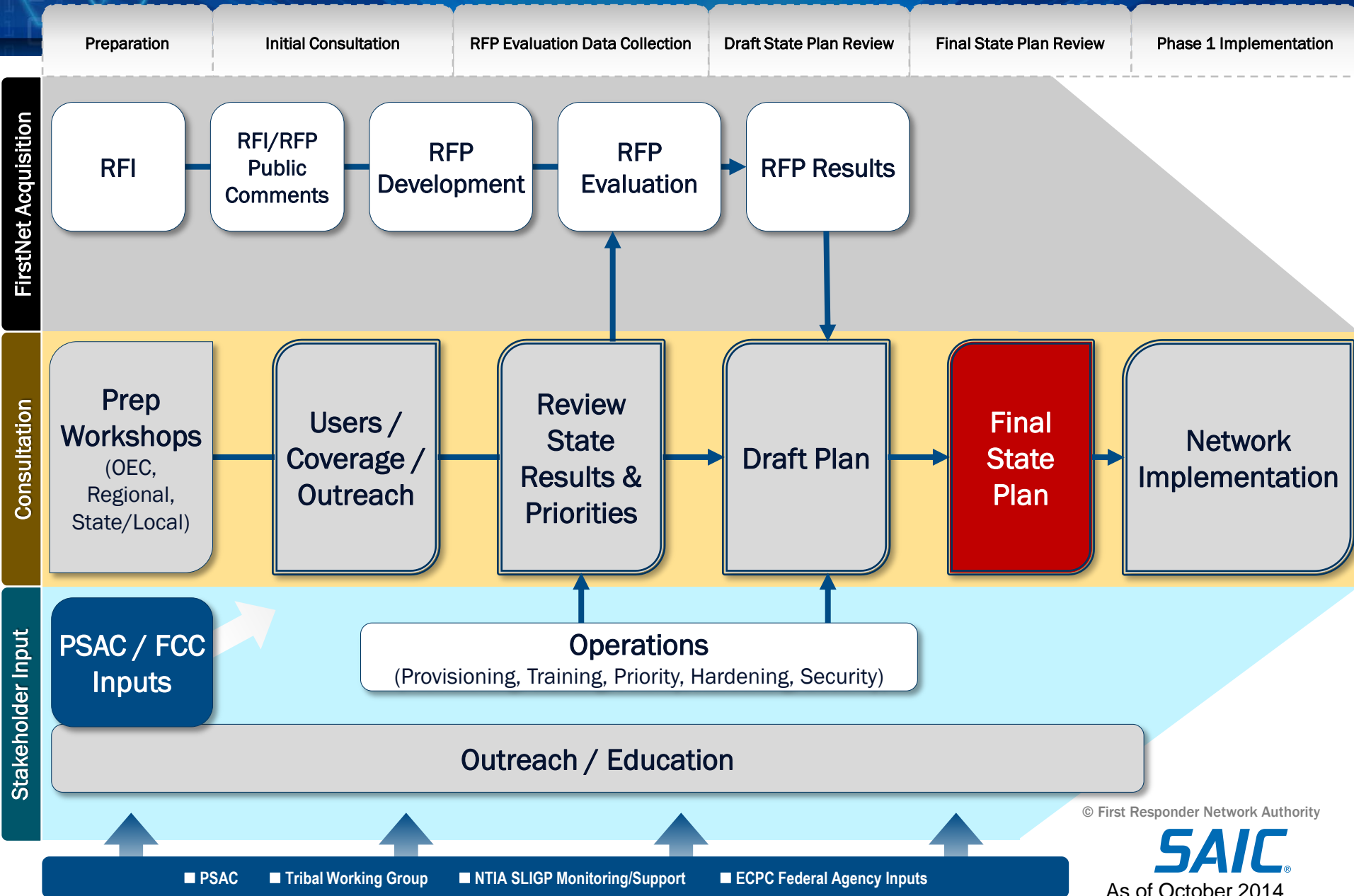
Cal OES FirstNet Outreach and Consultation

In addition to establishing CalFRN, State progress includes

- Formed Cal OES core team
- Hired public safety broadband consultant
- Developed Education and Outreach Plan
- Developed presentations, flyers, and outreach materials
- Conducting town hall meeting webcasts
- Conducting FirstNet in California Survey
- Hosted OEC coverage objectives workshops
- Responded to FirstNet RFI and Interpretations of Parts of the Act
- Developing California FirstNet Roadmap
- Submitting Consultation Checklist



Updated Consultation and State Plan Process



The Future is Now

LA-RICS

Happening Now

Public Safety LTE Design & Build – LA County

Los Angeles Regional
Interoperable Communications
System Joint Powers Authority
(LA-RICS)



- There are 192 monopole sites identified for the LTE network in all of Los Angeles County
 - All sites meet criteria for CEQA exemption
 - NEPA clearance required for all sites
- 27 monopole sites will have both LMR and LTE



LTE Deployment:

18 Month Program deployed in five Phases:

- Phase 1 – System Design (Mar 2014 – Jun 2014)
- Phase 2 – Site Construction (Jun 2014 – Mar 2015)
- Phase 3 – Supply LTE Equipment (Aug 2014 – Mar 2015)
- Phase 4 – System Implementation (Oct 2014 – Aug 2015)
- Phase 5 – System Maintenance (Aug 2015)

BTOP funds expire in August 2015



Next Steps for FirstNet

The Road to FirstNet

FirstNet Timeline

2014-2016

Roadmap
Outreach and awareness
Collect local data and design network
Develop and award supplier RFP
Establish network core

THE ROAD TO FIRSTNET

2016+

Governor reviews design
offer and opts in or out of
FirstNet network deployment
Integrate Next Generation 9-1-1

2022

Last spectrum auction
Network substantially in operation

SAIC

Help us manage expectations

- LTE is not a replacement for LMR technology today
- LMR will continue to provide mission critical voice communications for the foreseeable future
- The LTE *data* network introduces new capabilities to assist the first responder
 - Provides new supplementary data and video services
 - Its true power and value will be realized once useful, interoperable applications are in the hands of users



Learn more about FirstNet

- **On the Web**

www.firstnet.gov – the latest from the national level

www.calema.ca.gov – search “CalFRN”

www.firstnetinoregon.org – articles, videos, weblinks, newsfeeds

- **Inform your staff and peers**

Contact Cal OES for outreach materials, speaking schedules, and more:

CalFRN@CalOES.ca.gov

916.657.9466

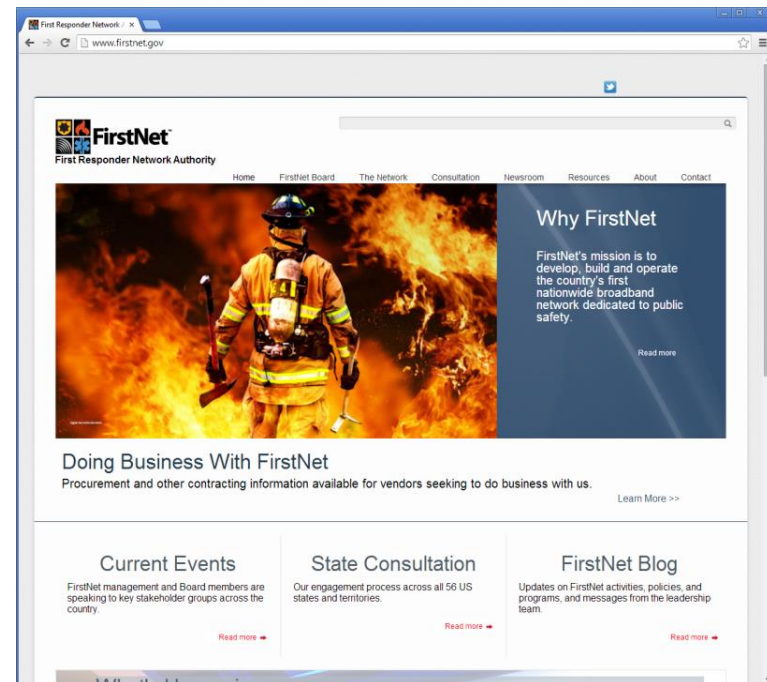
- **Learn more about LTE technology:**

Coverage/Capacity (mobile, portable, in-building)

Backhaul, Security, Cost

User Devices (mobile, handheld, tablets)

Public Safety Applications



Thank You

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Courtesy of FirstNet